National Emergency Medical Services Advisory Council

Virtual Meeting Summary

November 3–4, 2021

Contents

Day 1: November 3, 2021 1
Call to Order and Introductions 1
Opening Comments 1
Swearing In of New NEMSAC Representatives 2
FICEMS Update 3
Introduction to Office of EMS Staff 6
Election of NEMSAC Chairperson and Vice Chairperson 7
Review of Action Items for Proposed Advisories 7
Discussion of New and Emerging Issues 8
Public Comment 9
Review of Action Items 11
Day 2: November 4, 2021 11
Approval of February 10–11, 2021, NEMSAC Meeting summary 11
Appointment Terms 11
Appointment of Subcommittee Members and Chairs 11
2021–2022 Strategic Planning 12
Public Comment 15
Review of Action Items 15
Adjournment 16
Appendix A: Participants 17
Appendix B: Summary of Rolling Presentations 18
Federal Communications Commission 18
COVID-19 Response 18
FICEMS Evidence-Based Practice and Quality Committee 18
National EMS Information System (NEMSIS) 19
Impact of COVID-19 on EMS 20
Workforce and Safety Subgroup of FICEMS 20
Pediatric Readiness: EMS for Children 20
Appendix C: Subcommittee Meeting Summaries 22
Preparedness and Education Subcommittee 22
Equitable Patient Care Subcommittee 23
Appendix D: NEMSAC Subcommittee Appointments 27

National Emergency Medical Services Advisory Council
November 3–4, 2021
Virtual Meeting Summary

These minutes, submitted pursuant to the Federal Advisory Committee Act, are a summary of discussions that took place during the National Emergency Medical Services Advisory Council (NEMSAC) virtual meeting on November 3–4, 2021. See Appendix A for a list of NEMSAC members in attendance. The rolling presentations displayed during meeting breaks are summarized in Appendix B.

Day 1: November 3, 2021

Call to Order and Introductions

Jon Krohmer, MD, Office of Emergency Medical Services (EMS), NHTSA

Dr. Krohmer, the designated federal official for NEMSAC and director of the Office of EMS in the National Highway Traffic Safety Administration (NHTSA), called the meeting to order in lieu of the NEMSAC chair, who would be elected during this meeting. The Office of EMS is responsible for NEMSAC's administration.

Since the last NEMSAC meeting, the Secretary of Transportation renewed the council's charter. This meeting would feature presentations and discussions about NEMSAC's activities and responsibilities as well as topics for NEMSAC to address in the coming year.

Opening Comments

Steven Cliff, PhD, NHTSA

This would be Dr. Krohmer's final NEMSAC meeting before his retirement. Dr. Cliff characterized Dr. Krohmer as a consummate professional who has provided outstanding guidance to NHTSA and the EMS community throughout the COVID-19 pandemic. Dr. Krohmer managed the secretarial appointment cycles for two NEMSACs and provided editorial feedback on every NEMSAC advisory issued during his tenure. On behalf of NHTSA, Dr. Cliff thanked Dr. Krohmer for his service and wished him well in his retirement. Dr. Krohmer said that his work at the Office of EMS and as an EMS medical director has been very rewarding, as has his work with the many organizations involved in EMS, including NEMSAC.

Dr. Cliff welcomed the new NEMSAC members, who are joining a body that provides important support to EMS clinicians so that they can serve their communities. As NHTSA's only advisory committee, NEMSAC provides a forum for the development, consideration, and communication of information from a knowledgeable and independent perspective. NHTSA and Dr. Cliff thanked the new members for their willingness to serve on this committee.

The last two years have taxed the first responder community like never before. Sadly, too many EMS personnel, telecommunicators, police officers, and firefighters have been lost to COVID-

19—the most recent tally is 956 first responders. Those present honored their memories and sent their sympathies to their families, friends, and colleagues.

COVID-19 vaccines are now available that reduce the chance of serious illness, hospitalization, and spread of COVID-19 to others. Dr. Cliff encouraged all meeting participants to obtain a vaccine for themselves and the communities they serve. If they have questions about the vaccines, they should seek answers from reputable sources, such as physicians and local, state, and federal health resources.

NEMSAC plays an important role in supporting the EMS community, especially in times like these. Dr. Cliff encouraged NEMSAC members to keep listening and reaching out to fellow clinicians and working to elevate EMS and 911 issues at the national level.

The Office of EMS continues to work on several important projects of interest to this group. The Federal Interagency Committee on EMS (FICEMS) is developing a white paper on interim response capabilities that will provide lessons learned from the pandemic and identify best practices. This paper should be published in mid-2022. The Office of EMS is also developing evidence-based guidelines for prehospital airway management.

Swearing in of New NEMSAC Representatives

Steven Cliff, PhD, NHTSA

Dr. Cliff swore in the new NEMSAC members, who took the oath of office. These members, appointed by the Secretary of Transportation, serve as government representatives of 25 sectors of EMS.

Introductions of Members and Disclosures of Conflicts of Interest

Jon Krohmer, MD, Office of EMS, NHTSA

Dr. Krohmer asked NEMSAC members to introduce themselves and to list any potential conflicts of interest. Although conflicts of interest do not typically prevent individuals from serving on NEMSAC, some members might need to avoid involvement in certain discussions.

See Appendix A for the list of current NEMSAC members, including their geographic locations and the sectors they represent. Member biographies are available on the NEMSAC page of EMS.gov.

NEMSAC members starting a second term are as follows.

- Kathleen Adelgais, MD, MPH/MSPH
- Mary Ahlers, MEd, RN
- Cherie Bartram
- Richard Bradley, MD
- Lori Knight, RN
- William “Mike” McMichael, III
- Chuck O’Neal
- Matthew Powers, RN

- Peter Taillac MD
- Jonathan Washko, MBS

The list of new NEMSAC members is as follows.

- Tom Arkins
- Lisa Basgall, MA
- Lillian Bonsignore
- Paul Brennan
- David Fifer, MS
- Mark Gestring, MD
- Brenden Hayden
- Carol Jorgensen
- Danita Koeler, MD
- Jason McMullan, MD
- David Mendonsa, MCHS, MPA
- Ayobami Ogunsola, DEd
- Suzanne Prentiss, MPA
- Alicia Sledge
- Ryan Walter, MBA, EdD

The only potential conflict of interest reported was from Mr. Fifer, who is an intermittent employee of the Office of the Assistant Secretary for Preparedness and Response of the U.S. Department of Health and Human Services (HHS).

Dr. Krohmer extended condolences to Ms. Prentiss, who had attended a funeral that morning for a New Hampshire state trooper who was killed in the line of duty. Deaths of first responders in the line of duty along with the loss of public safety colleagues during the COVID-19 pandemic reinforce the importance of their work and the dangers they face.

FICEMS Update

Pritesh Gandhi, MD, Department of Homeland Security (DHS) and FICEMS Chair

Congress established FICEMS in 2005 to ensure coordination between federal agencies and to support local, regional, state, tribal, and territorial EMS and 911 systems. FICEMS has representatives from the Department of Transportation (DOT), HHS, DHS, Department of Defense (DoD), and Federal Communications Commission (FCC). FICEMS has a new 5-year strategic plan.

Introduction of FICEMS Representatives

Dr. Krohmer asked the FICEMS representatives in attendance to introduce themselves and their agencies.

DoD

Mark Gentilman, MD, Director of Medical Preparedness Policy at DoD, explained that the FICEMS representative from DoD is Elizabeth Fudge, MSN, MPH. Ms. Fudge is a supervisory

program analysis for health readiness policy and oversight in the Office of the Assistant Secretary of Defense for Health Affairs. Ms. Fudge represents the Office of the Secretary of Defense and the EMS programs in the Army, Navy, and Air Force.

HHS

Theresa Morrison-Quinata, Chief, Emergency Medical Services for Children Branch in the Maternal and Child Health Bureau, represents the Health Resources and Services Administration (HRSA). HRSA's EMS for Children program works to improve and expand EMS for children who need treatment for trauma or critical care through several grant programs for state governments and medical schools and through federal and national partnerships. HRSA's new Regional Pediatric Pandemic Network Program was mandated by Congress to coordinate efforts by children's hospitals and their communities to prepare for and respond to global health threats.

Jonathan Greene directs the HHS Office of Emergency Management and Operations and is the deputy assistant secretary for preparedness and response. Mr. Greene manages many preparedness and response activities, including the Medical Reserve Corps, National Disaster Medical System, and Strategic National Stockpile.

Darrell LaRoche directs the Office of Clinical and Preventive Services at the Indian Health Service. The Indian Health Service leads the federal health care system for the nation's 2.6 million American Indians and Alaska natives.

Skip Payne, MSPH, is the director for emergency preparedness and response operations at the Centers for Medicare & Medicaid Services (CMS).

An HHS representative on FICEMS was unable to attend this meeting: Michael Iademarco, MD, MPH, director of the Center for Surveillance, Epidemiology, and Laboratory Science at the Centers for Disease Control and Prevention.

DHS

Dr. Gandhi is the chief medical officer at DHS, and his staff advise the Secretary of Homeland Security and other DHS leaders on medical and public health issues. The DHS EMS program is growing, and the agency has approximately 3,500 EMS employees.

Gregory Williams, a fire program specialist at the U.S. Fire Administration (USFA), explained that the USFA representative on FICEMS is Richard Patrick, MS, director of the National Fire Programs Division. USFA supports all aspects of the nation's fire service, including fire service-based EMS agencies, through educational programs as the USFA National Fire Academy, research, and fire response data collection. Approximately 65% to 70% of fire service responses in the United States are for emergency medical care, and approximately 50% of EMS in the United States is provided by the fire service.

DOT

Dr. Cliff represents DOT on FICEMS and has been nominated to become the new NHTSA administrator.

FCC

David Furth, JD, is deputy chief of the Office of the Bureau Chief in the Public Safety and Homeland Security Bureau at FCC. Unlike the other FICEMS members, FCC is neither a health care nor an emergency response agency. Instead, FCC regulates the communications industry. FCC has a FICEMS representative because most EMS responses start with a 911 call, and FCC has regulatory responsibility for 911 providers. The 988 code has recently been set aside for use by the National Suicide Prevention Hotline.

State EMS Directors

Steve McCoy, administrator for the EMS Bureau in the Florida Department of Public Health, was unable to attend this meeting.

Introduction of the Technical Working Group

Dr. Krohmer explained that the FICEMS Technical Working Group (TWG) is made up of staff members from the federal agencies represented on FICEMS. The senior-level FICEMS representatives attend FICEMS meetings twice a year to set the direction for FICEMS activities. The TWG subgroups work on various projects, and their cochairs provided updates on their activities.

Evidence-Based Practice and Quality

Diane Pilkey, RN, MPH, a senior nurse consultant in the Maternal and Child Health Bureau at HRSA, cochairs this subgroup with Dr. Krohmer. This group promotes evidence-based treatment, including the development and propagation of evidence-based guidelines and the measurement of performance and outcomes. An example of this subgroup's work resulted from a 2020 NEMSAC recommendation for EMS agencies to appoint a pediatric emergency care coordinator. Implementation of this recommendation provides vital support to the EMS for Children program's efforts to improve emergency care for children. In addition, this program is funding three research projects to collect evidence on the impact of these coordinators on the quality of care and outcomes for children.

Data Systems Exchange and Analytics

Eric Cheney of the Office of EMS explained that Rachel Abbey, MPH, a public health analyst in the Office of the National Coordinator for Health at HHS, is the chair of this subgroup, and David Millstein, MS, of USFA is the new cochair. This subgroup's main goal is to promote the comprehensive identification and dissemination of clinical best practices through the use of EMS data. This subgroup addresses seven goals and objectives in the FICEMS strategic plan.

Systems Integration and Preparedness

Gam Wijetunge, MS, of the Office of EMS cochairs this subgroup, which addresses Objectives 3.1 and 3.2 of the FICEMS strategic plan, with Ms. Morrison-Quinata. The subgroup recently received a briefing from the newly established Regional Pediatric Pandemic Network and is communicating with network investigators. The subgroup includes representatives from DoD's National Center for Disaster Medicine and Public Health, which is leading a pilot program to examine and improve the center's capabilities to receive military casualties.

Workforce Safety

Mr. Williams, who cochairs the Workforce Safety Subgroup with Dave Bryson of the Office of EMS, explained that this group addresses Goals 5 and 6 from the FICEMS strategic plan. Activities include:

- Supporting measurement and data collection to promote safety and evaluate factors that contribute to medical errors and threaten patient safety
- Supporting the development and use of anonymous reporting systems to document near misses
- Supporting the implementation of the EMS culture of safety strategy
- Promoting implementation of the EMS Education Agenda for the Future
- Supporting state, local, tribal, and territorial efforts to enhance interstate legal recognition and reciprocity of EMS practitioners across jurisdictions
- Working with EMS offices to support the transition of military EMS providers to civilian practice
- Promoting the EMS Workforce Agenda for the Future
- Encouraging data-driven EMS workforce planning

Education and Training

Michael Stern, a training specialist for the EMS program at the National Fire Academy, cochairs this new subgroup with Clary Mole of the Office of EMS. The subgroup is seeking additional members and expects to address objectives for most of the goals in the FICEMS strategic plan because training and education are related to most aspects of EMS.

Introduction to Office of EMS Staff

Dr. Krohmer said that he was honored to have the opportunity to work with the Office of EMS staff, who are knowledgeable and talented and work together well. The point of contact for NEMSAC issues is Mr. Mole, and NEMSAC members can contact any staff member in the office about other EMS issues. Dr. Krohmer asked members of the Office of EMS staff to introduce themselves.

Laurie Flaherty explained that she coordinates the National 911 Program. Her responsibilities are to bring the 911 community together to address a variety of issues; collect resources for those operating 911 systems at the local, state, and federal level; and administer a grant program with the Department of Commerce to upgrade 911 technology.

Ms. Flaherty encouraged NEMSAC members to explore 911.gov to learn about the program's activities and products. Kate Elkins, MPH, is an EMS and 911 specialist who spends half her time on 911 activities and half on EMS activities. Her EMS responsibilities involve projects related to public health, mental health and wellness, and suicide prevention for first responders.

Dr. Krohmer reported that Ms. Flaherty will retire at the end of the year after a long and productive career, including 17 years as the National 911 Program coordinator. DOT is recruiting a replacement for Ms. Flaherty along with other 911 program staff. In the interim, Ms. Elkins will spend more of her time on 911 activities.

EMS specialists in the office are:

- Mr. Bryson. who works on several EMS education issues, especially implementation activities for the EMS Education Agenda for the Future
- Mr. Wijetunge, who works on evidence-based guidelines, preparedness, air medical, and workforce issues.
- Mr. Cheney, who oversees the National EMS Information System (NEMSIS)
- Max Sevareid, who works on evidence-based guidelines
- Mr. Mole, who coordinates FICEMS and NEMSAC activities and assists with state EMS assessments and education and training

Election of NEMSAC Chairperson and Vice Chairperson

Dr. Krohmer asked for nominations for the new NESMAC chair. The only nominee was Chuck O'Neal, who accepted the nomination. A motion carried to close nominations. Mr. O'Neal reported that he has been a NEMSAC member since July 2018. While on the council, he was chair of the Ad Hoc Opioid Personal Protective Equipment (PPE) Committee and vice chair of the Equitable Patient Care Committee. As deputy executive director for the Kentucky Board of EMS, his responsibilities include management of regulatory and government affairs, disciplinary matters, and meeting facilitation. He has substantial experience in managing, planning, and facilitating meetings. Mr. O'Neal believes that a chair should remain impartial and ensure that ideas are shared openly.

Dr. Krohmer opened the floor for nominations for NEMSAC vice chair. Two NEMSAC members, Ms. Ahlers and Mr. Powers, were nominated, and both accepted the nomination. A motion carried to close nominations. Ms. Ahlers reported that she is a clinical coordinator for critical care transport and has written EMS textbooks and several local, national, and international curricula. Mr. Powers was chair of the NEMSAC Profession Safety Committee, which submitted three advisories that were approved in the past year. Mr. Powers is familiar with NEMSAC and has experience running meetings.

After NEMSAC members submitted their votes, Mr. Mole announced that the new NEMSAC chair is Mr. O'Neal and the new NEMSAC vice chair is Ms. Ahlers. Mr. O'Neal chaired the rest of the meeting.

Review of Action Items for Proposed Advisories

Summaries of NEMSAC subcommittee meetings that took place immediately before the start of this NEMSAC meeting are available in Appendix C.

Equitable Patient Care Subcommittee

Dr. Bradley described health outcomes disparities in out-of-hospital cardiac arrests. For example, rates of bystander cardiopulmonary resuscitation and automated external defibrillator use are lower in low-income communities and those primarily made up of people of color, leading to lower survival rates. The Institute of Medicine (now the National Academy of Medicine) issued a report in 2015 that recommended the creation of a national registry to collect data on out-of-hospital cardiac arrests.

NEMSAC's Equitable Patient Care Committee developed an advisory, Reducing Social Inequities in EMS Through a National Out-of-Hospital Cardiac Arrest Registry, with recommendations on this issue that received interim approval. However, the subcommittee would like to change the status of this advisory from interim to draft so that it can make revisions for consideration at a future meeting. A motion carried to change the status of this advisory to draft.

Preparedness and Education Subcommittee
Ms. Knight explained that this committee's advisory, Human Trafficking Education for EMS Professionals, has interim status and recommends education for all EMS professionals on human trafficking. A motion carried to grant final status to this advisory.

Discussion of New and Emerging Issues

Mr. O'Neal asked NEMSAC to identify new and emerging issues for NEMSAC to address in the coming year. Suggested new topics were as follows:

- Cybersecurity for public safety agencies, including how to identify and mitigate cybersecurity threats
- EMS as an essential service, which could ensure funding for EMS agencies throughout the country
- Federal funding for paramedic education, especially for EMS providers in underserved areas
- Collection of data on the outcomes of EMS patients, especially accurate demographic data to identify disparities and inequities in EMS care
- Social determinants of health, including documentation by EMS personnel of these issues
- EMS care variations during the COVID-19 pandemic
- Compensation for practitioners of EMS medicine, a new subspecialty of emergency medicine, because strong medical direction is important for EMS agencies

NEMSAC members also suggested revising existing advisories on the following topics:

- Staffing and reimbursement challenges
- Mental health and suicide prevention services for EMS providers
- Personal safety for EMS providers
- EMS credentialing and education requirements
- EMS nomenclature
- CMS Emergency Triage, Treat, and Transport (ET3) model
- Long wait times for ambulances to offload patients to the emergency department (ED)

Mr. Washko recommended that NEMSAC revive the Ad Hoc Vehicle Crash Committee, which has been dormant since the start of the COVID-19 pandemic, or assign this topic to a standing NEMSAC committee.

Ms. Ahlers pointed out that the Preparedness and Education Subommittee developed final advisories on education and nomenclature and asked why they are not posted on EMS.gov. Dr. Krohmer said that the Office of EMS will check the status of these advisories.

Mr. Cheney offered to invite ET3 program leaders from CMS to give a presentation at a future NEMSAC meeting. Ms. Knight suggested that the ET3 program representatives provide an update on the ET3 pilot program, which offers some options that could reduce the flow of patients from ambulances to the ED if they are widely adopted.

Mr. Powers suggested that NEMSAC hear from the Department of Labor at a future meeting about the paramedic and emergency medical technician (EMT) staffing shortage. Dr. Krohmer said that the Office of EMS can schedule this presentation, but the department probably has no data yet on the impact of the COVID-19 pandemic on EMS staffing because the pandemic is so recent. Mr. O'Neal is planning a survey in Kentucky and a few other states of perspectives of individuals aged 20–35 years on entering the EMS field. The survey will identify some of the barriers to entering the field for younger individuals. Ms. Basgall suggested consulting the National Registry of EMTs workforce study, and Melissa Trumbull from the National Association of EMTs (NAEMT) noted that a recent American Ambulance Association study found a 20% to 30% annual turnover rate for EMTs in the United States.

Public Comment

Dr. Krohmer read aloud a comment received in writing from Maria Bianchi, CEO of the American Ambulance Association:

> Thank you for the opportunity to address the NEMSAC. The American Ambulance Association is the organization representing hundreds of ambulance companies that serve over 75% of the U.S. population. We are excited to meet the new and returning NEMSAC appointees. Much has dramatically changed in the EMS and ambulance world since you all met last.
>
> At the center of every industry conversation are workforce issues. Inextricably tied to the workforce are systemic challenges of insufficient reimbursement and a complex delivery system with thousands of locally designed models. I ask NEMSAC to keep these realities at the forefront of your thoughts as you begin to prioritize your work.
>
> The American Ambulance Association members are committed to caring for patients first, and we offer any assistance we can provide to NEMSAC in its work toward our shared mission.

Dr. Krohmer read aloud another written comment submitted by the REV Group's ambulance division:

> We want to share with the council our concerns about supply chain disruptions and the negative impact they are having on the EMS community in terms of prehospital care and patient transport. A prime example of such disruptions are the ongoing delays of shipments of chassis and other essential components for the manufacturing of ambulances. These delays are a primary contributor to the growing lead times that are hindering the ambulance industry's ability to fill orders from EMS providers in a reasonable timeframe. In many cases, lead times on new ambulances are extending beyond a year, and little relief is in sight.

> This issue has been raised by REV Group and other manufacturers, ambulance manufacturers (Braun Industries, Braun Northwest, Crestline Coach, Demers Ambulances, Excellence, Frazer, Malley Industries, Medix Specialty Vehicles, PL Custom Emergency Vehicles, and Tri-Star Industries), as well as EMS associations to chassis manufacturers and to political leaders. But today, we have only seen minor improvements.
>
> We ask the council's support in continuing to elevate this issue and creating additional pressure for prioritizing the needs of the EMS and the industries that support them. We also want to echo the concerns raised by other EMS industry stakeholders, such as the American Ambulance Association, NAEMT, and the International Fire Chiefs Association regarding staffing shortages. These issues go hand in hand with having the right levels of resources, people, and equipment to serve our nation's EMS needs.
>
> We appreciate the work that NEMSAC is doing to support the EMS community, and we appreciate the opportunity to submit comments.

Dr. Krohmer said that the ambulance chassis shortage is a concern, and only 4,500 new ambulances are likely to be built this year instead of the usual 5,000. One reason for the shortage is the lack of microchips, and the Office of EMS has discussed this concern with NHTSA and DOT leaders as well as other stakeholders. The microchip shortage is also causing shortages of automatic external defibrillators for public-access defibrillation programs. How long the microchip shortage is likely to last is not yet clear. Claudia Garber from REV Group explained that her company is asking for prioritization of needed supplies to industries supporting EMS.

A third public comment came from Dan Pojar, EMS Division director at the Milwaukee County Office of Emergency Management:

> Is this council considering recommending that EMS become recognized as an essential service in the United States?

Former NEMSAC chair Vince Robbins reported that NEMSAC previously prepared three advisories on EMS financing and suggested that NEMSAC subcommittees considering new advisories on this topic consult those documents first. Mr. Mole clarified that NEMSAC issued its advisory, EMS Funding and Reimbursement, in 2016 and a revised version of this advisory in 2019. Mr. Washko recommended that NEMSAC consider updating or replacing this advisory.

Mr. McMichael said that staffing shortages, especially in routine transport roles, have been an ongoing challenge in his region since the COVID-19 pandemic began. Many providers were laid off and did not return to EMS agencies. Incentives, such as tax breaks and educational grants, might help address this need.

Review of Action Items
Chuck O'Neal, Chair, NEMSAC

Action items identified during the first day of the NEMSAC meeting were as follows:

- Finalize the human trafficking advisory and upload it to EMS.gov.
- Consider the public comments as NEMSAC subcommittees identify topics for new or updated advisories.

Day 2: November 4, 2021

Approval of February 10–11, 2021, NEMSAC Meeting summary
A motion carried to approve the summary of the February 10–11, 2021, NEMSAC meeting.

Appointment Terms
Dr. Krohmer explained that the 2-year terms of the new NEMSAC members began when they received their appointment letters from the Secretary of Transportation. The initial 2-year terms of the incumbent members were extended to include this meeting, and their terms will end in April 2022. All incumbent members are asked to send an email to Mr. Mole by November 19 indicating whether they would like to remain on NEMSAC for a second term. The Office of EMS will then send reappointment recommendations to the Secretary of Transportation for members who choose to serve a second term, and those terms will begin when the Secretary provides approval. The Office of EMS will post a notice in the *Federal Register* seeking nominations to replace those who are unable to remain on NEMSAC.

Dr. Adelgais asked about the timeframe for approving reappointments of incumbent members. Dr. Krohmer said that this process is likely to take 6 to 8 weeks.

Appointment of Subcommittee Members and Chairs
Mr. O'Neal reported that he and Dr. Krohmer had reviewed the responses from NEMSAC members about their subcommittee preferences and assigned four members to each subcommittee, including a chair and vice chair. Because serving on more than one subcommittee and attending each group's monthly meetings can be challenging, Mr. O'Neal and Dr. Krohmer appointed each NEMSAC member to serve as a voting member on only one subcommittee. NEMSAC members interested in more than one subcommittee were appointed as ex officio (non-voting) members to additional subcommittees. See Appendix D for a list of NEMSAC members in each subcommittee.

The next steps are for the chair of each subcommittee to schedule their group's first meeting. The subcommittees typically meet monthly, and Sharon Peoples of JDC Events coordinates these meetings. Dr. Krohmer noted that because NEMSAC is a Federal Advisory Committee Act committee, the Office of EMS must schedule and oversee all subcommittee meetings. For this reason, subcommittees should not schedule meetings without working with Ms. Peoples.

Ms. Sledge, who was appointed chair of the Ad Hoc Motor Vehicle Crash Subcommittee, said that she will probably have questions about her responsibilities. Mr. Washko offered to update Ms. Sledge on the previous activities of this group.

2021–2022 Strategic Planning

Mr. O'Neal asked NEMSAC to review a list from outgoing 2018–2021 NEMSAC members of potential advisory topics as well as the topics identified the previous day. Mr. O'Neal will assign each of the topics in these lists to a NEMSAC subcommittee. Each subcommittee will choose one of these topics or a different topic for its first advisory. To ensure the development of high-quality advisories and avoid overwhelming NEMSAC members, each subcommittee will work on only one advisory at a time.

Once each subcommittee has chosen its initial priority, which could be a new topic or an update of an existing advisory, the committee chair should send that top priority to the Office of EMS. Office staff will discuss with Mr. O'Neal and Ms. Ahlers potential conflicts and, if none are identified, quickly let the subcommittee know that it may proceed.

Dr. Krohmer encouraged NEMSAC to give higher priority to topics that could lead to actionable recommendations to FICEMS or the Secretary of Transportation. A topic that might not fit this criterion is one suggested by the 2018–2021 NEMSAC: the use of emergency lights and sirens to reduce emergency vehicle accidents and injuries and to improve responses. Several initiatives in the EMS community are addressing this issue, and NEMSAC might review those activities and consider giving this topic lower priority. In addition, an advisory from NEMSAC to CMS to expand the implementation of the ET3 model would not be appropriate because CMS cannot do so before the 5-year pilot project is completed.

Mr. Washko explained that some health systems that were accepted into the ET3 pilot program learned that if they have corrective action plans, they must withdraw from the program. NEMSAC could let CMS know of this issue. Dr. Krohmer said that the best way to convey these concerns is in response to a briefing from CMS to NEMSAC. Developing an advisory typically takes 12–18 months, so this process might not be appropriate for the ET3 issues.

Mr. O'Neal asked all subcommittees to review previous NEMSAC advisories on EMS.gov before developing a new advisory. Dr. Krohmer reported that NEMSAC members will receive an Excel spreadsheet listing the advisories issued by year and their main recommendations.

Review of Advisory Topics Proposed by the 2018–2021 NEMSAC

Dr. Krohmer offered comments on some of the topics in the list from the 2018–2021 NEMSAC. Unless noted otherwise, all of the comments below come from Dr. Krohmer.

<u>Integration and Technology</u>

- Improved integration of NHTSA's crash investigation group into ambulance crashes: The Office of EMS is revising a 2012 report summarizing ambulance crash data, and Mr. Bryson could brief the subcommittee on this topic.
- Handoffs of calls between public service answering points and telehealth providers: A new 988 mental health crisis line will be fully operational by July 2022. Ms. Bartram

noted that the timeline for implementing the new line is ambitious. Dr. Krohmer said that a NEMSAC advisory on this topic might not be finished until after this line is operational, which might be too late. Ms. Elkins can provide information on this topic if the subcommittee decides to address it.

- Patient medical data transfer during calls, in real time, to receiving health care facilities: The NEMSIS team is working with the Office of the National Coordinator for Health Information Technology at HHS to address this issue.
- Follow-up on automated vehicle development, especially government investments, and integration of this technology into emergency vehicles: The Office of EMS can provide a briefing on this topic, but automated vehicle development is still at an early stage.
- Standardized training for data managers: The National Association of State EMS Officials Data Managers Council has addressed this topic.
- Development of mechanisms to analyze data to produce positive outcomes: A great deal of work can be done in this area.

Profession Safety

- Air and ground EMS patient transfer issues, especially stretcher to stretcher (when stretchers are incompatible): Mr. Powers explained that this topic is about equipment compatibility.

Equitable Patient Care

- Social determinants of health and the use of EMS services, relationship of social determinants to evolving EMS public health mission (expansion of community paramedicine and scope of practice): NEMSIS data are deidentified, and they have limited geographic information. The NEMSIS team is updating the data use agreements with state EMS offices, which might increase the amount of demographic data, including data related to social determinants of health, in NEMSIS.
- Expansion of EMS care delivery to include detailed observations of patient circumstances (e.g., food insecurity, filthy environment, homelessness, abuse) that can provide information on their health: Dr. Krohmer said that this is a good idea.
- Reassessment and update of the EMS Research Agenda for the Future: This is related to a suggestion from the previous Profession Safety Committee to establish an EMS research agenda with prioritized topics.
- Recruitment and retention of minorities to help reduce inequities in patient care: Several initiatives are underway to address workforce issues, including recruitment and retention, qualifications, and violence against EMS clinicians.

Sustainability and Efficiency

- Financial sustainability during a sustained, protracted, widespread disaster that adversely affects EMS organizations: Before a NEMSAC subcommittee considers this issue, it should review the 2016 and 2019 NEMSAC advisories on financing. Unless the 2019 version needs major changes, NEMSAC's time might be better spent on other topics.
- Dispatch center integration into the developing health care–oriented paradigm associated with expansion of EMS services into public health: This topic overlaps with the third integration technology topic regarding public service answering point handoffs.

- Creation of a dashboard for real-time financial stress issues for EMS agencies: NEMSIS has recently used national data to create several dashboards and reports on the impact of the COVID-19 pandemic on EMS operations. The weekly EMS by the Numbers Report provides updates, but these are national data only, and regional data might be useful.

Other Topics

Dr. Krohmer was surprised that no one had suggested an advisory on EMS now and in the future. During the pandemic and ongoing staffing shortages, EMS agencies are wondering, for example, whether to send two paramedics on each vehicle or to send paramedics on all calls. Mr. Washko noted that the current trend is to bring health care into the home. A community paramedicine model might address recruitment and retention challenges while giving paramedics and EMTs opportunities to extend their careers. Dr. Krohmer noted that some hospitals are sending patients from the ED to the home to receive care, and these patients are still considered inpatients. This model might offer new reimbursement opportunities to EMS agencies.

Ms. Basgall asked about NEMSAC's role in developing advisories related to telecommunicators. Dr. Krohmer explained that the Office of EMS is responsible for both EMS and the National 911 Program. Ms. Elkins added that FCC regulates the 911 process until the call reaches the 911 center, and the National 911 Program works on what happens once a call reaches a 911 center. Program staff can provide resources and contact names to NEMSAC if a subcommittee develops an advisory related to 911 services.

Ms. Bonsignore asked whether NEMSAC has discussed ambulance vehicle safety feature requirements. Dr. Krohmer said that NHTSA can give the General Services Administration input on these requirements. NEMSAC could consider whether the existing standards are an appropriate topic for an advisory.

Mr. O'Neal reported that NEMSAC published a position statement on EMS as an essential service in 2009, and the Office of EMS published *An Analysis of Prehospital Emergency Medical Services as an Essential Service and as a Public Good in Economic Theory* in 2014. Dr. Krohmer added that NAEMT has also released a position statement on this issue, and the Office of EMS will look for other statements on this topic to share with NEMSAC. The federal government is unlikely to designate EMS as an essential service because this is typically a state responsibility. A state determination that EMS is an essential service gives EMS agencies access to certain funding sources, but the jurisdiction needs to collect taxes to provide financial support to these agencies. Thus, defining EMS as an essential service is an important step but does not automatically provide funding. Ms. Prentiss agreed that the effects of designation of an essential service depend on the state, and such mandates are sometimes unfunded.

Mr. O'Neal wondered why microchips are not manufactured in the United States, which would help alleviate the shortage and enable more ambulances to be manufactured. Mr. Washko said that microchips could be manufactured in the United States but establishing this capability will take years. Mr. Washko suggested that NEMSAC recommend giving greater priority to providing microchips and other items in short supply to manufacturers of ambulances and other equipment needed by EMS agencies to promote public safety and national security. Dr. Krohmer pointed out that the medical community accounted for less than 15% of N95 masks needed

during the COVID-19 pandemic, and EMS agencies probably represent only a small proportion of the needs for supplies that are difficult to obtain. In addition, DOT is looking into the ambulance chassis shortage. Mr. Washko suggested that NEMSAC send NHTSA a letter explaining its concerns about supply shortages.

Advisory Development Process
Mr. O'Neal asked NEMSAC members to send details on needed briefings from subject matter experts at a future NEMSAC meeting to Mr. Mole. In addition, because of federal regulations, all advisories and agenda items must be sent to Mr. Mole at least 30 days before each NEMSAC meeting. If advisories come in later than that date, NEMSAC will not be able to act on them.

Ms. Knight explained that NEMSAC has a list of definitions of EMS terms to use in its advisories to ensure consistency. Dr. Krohmer said that the subcommittees will receive this glossary of terms along with the template for advisories.

Future NEMSAC Meetings
Mr. Washko suggested that the Office of EMS send the dates for upcoming NEMSAC meetings in advance so that subcommittee chairs are aware of the deadlines for their advisories. Mr. O'Neal reported that NEMSAC will probably meet in February, May, August, and November 2022. The February meeting will probably be virtual, but NEMSAC might meet in person in May, depending on the COVID-19 pandemic at that time.

Dr. Krohmer said that the Office of EMS typically asks NEMSAC members to complete a Doodle poll indicating their availability on a few potential meeting dates that do not appear to conflict with major EMS events. The office then tries to choose a date that works for all NEMSAC members. If members have a conflict with the selected date, Dr. Krohmer hoped that they would try to reschedule the conflicting activity.

Dr. Krohmer explained that NEMSAC is required to meet in the Washington, DC, region. In the past, meetings were held in DOT buildings or hotel meeting rooms. Some future NEMSAC meetings could be held, instead, at a first response agency in the Washington region. NEMSAC members supported this suggestion.

Dr. Krohmer introduced Sharon Peoples of JCD Events, who provides contract support to the Office of EMS in its NEMSAC and FICEMS activities.

Public Comment
David Becker, MA, of the International Association of Fire Chiefs, asked whether members of the public could have online access to the documents provided to NEMSAC for its meetings, just as they receive hard copies of these documents at in-person NEMSAC meetings. Dr. Krohmer said that the meeting materials can be posted to EMS.gov.

Review of Action Items
Mr. O'Neal listed the action items from the second day of the meeting:

- The Office of EMS will send NEMSAC the advisory template; list of potential advisory topics; and list of NEMSAC subcommittee chairs, vice chairs, and members.

- NEMSAC members whose terms expire in 2022 will send Mr. Mole an email by November 19, 2021, indicating whether they would like to serve a second term.
- The Office of EMS will send the dates of NEMSAC meetings in 2022 to NEMSAC as soon as they are finalized.
- NEMSAC subcommittees will review previous advisories before they develop new ones to prevent duplication and wasted time and other resources.
- NEMSAC members will send suggestions for subject matter expert briefings at the February 2022 NEMSAC meeting to Mr. Mole.
- NEMSAC members will send Mr. Mole all agenda items and advisories at least 30 days before each NEMSAC meeting.
- Subcommittee chairs will work with Ms. Peoples to schedule their first meeting.

Mr. O'Neal thanked Dr. Krohmer for his leadership, mentorship, and expertise while directing the Office of EMS. Under Dr. Kramer's leadership, the Office of EMS, National 911 Program, NEMSAC, and FICEMS have consistently exceeded expectations and been proactive in leading EMS across the United States.

Adjournment

A motion carried to adjourn the meeting at 2:49 p.m. ET on November 4, 2021.

I hereby certify that, to the best of my knowledge, the foregoing minutes are accurate and complete.

Chuck O'Neal, Chair, NEMSAC Date

These minutes will be considered formally for approval by the council at its next meeting. Any corrections or insertions will be made in the minutes at that time.

Appendix A: Participants

NEMSAC Members in Attendance and Their Sectors

Kathleen Adelgais, MD, MPH/MSPH
Pediatric Emergency Physician
Golden, CO

Mary Ahlers, Med, BSN
EMS Educator
Cincinnati, OH

Tom Arkins
Data Manager
Indianapolis, IN

Cherie Bartram
Call Taker/Dispatcher
Richmond, MI

Lisa Basgall, MA
Local EMS Director/Administrator
Houston, TX

Lillian Bonsignore
Fire-based EMS
Bronx, NY

Richard Bradley, MD
Emergency Physician
Houston, TX

Paul Brennan
Hospital-based EMS
Lowell, MA

David Fifer, MS
EMS Practitioner
Richmond, KY

Mark Gestring, MD
Trauma Surgeon
Pittsford, NY

Brenden Hayden
Healthcare Administrator
Portsmouth, RI

Carol Jorgensen
Public Health
Elm Creek, NE

Lori Knight RN
Emergency Management
Placentia, CA

Danita Koeler, MD
Tribal EMS
Delta Junction, AK

William McMichael, III
Volunteer EMS
Delaware City, DE

Jason McMullan, MD
EMS Research
Cincinnati, OH

David Mendonsa, MCHS, MPA
Private EMS
Kahului, HI

Chuck O'Neal
State EMS Director
Berea, KY

Ayobami Ogunsola
Consumer
Philadelphia, PA

Matthew Powers, RN
Emergency Nurse
Pleasant Hill, CA

Suzanne Prentiss, MPA
State/Local Legislator
West Lebanon, NH

Alicia Sledge
Highway Safety
Lansing, MI

Peter Taillac MD
EMS Medical Director
Salt Lake City, UT

Ryan Walter, MBA, EdD
Air Medical EMS
Gilbert, AZ

Jonathan Washko, MBS
EMS Quality Improvement
Northport, NY

Appendix B: Summary of Rolling Presentations

Federal Communications Commission

The Federal Communications Commission (FCC) is a member of the Federal Interagency Committee on EMS (FICEMS) because of the critical role of communications in quickly securing life-saving EMS. FCC regulates the provision of 911 services. FCC requirements related to the FICEMS mission and goals include the delivery of automatic location information by communications service providers with 911 calls that meet accuracy standards, delivery of 911 texts and voice calls by service providers, and support for the new 988 code established by the Nationwide Suicide Prevention Lifeline by all U.S. service providers by July 2022.

COVID-19 Response

On March 20, 2020, the Healthcare Resilience Taskforce led by the Federal Emergency Management Agency and Department of Health and Human Services (HHS) formed the Prehospital/EMS Team, which later became an HHS working group. The goals of the team include ensuring the resilience of EMS response capabilities throughout the United States, promoting the safety of the EMS workforce, and identifying and filling training gaps for crisis standards of care and innovative protocol adoption.

The Prehospital/EMS Team held listening session to monitor challenges and identify solutions. Challenges identified included a lack of personal protective equipment, declines in reimbursement because of drops in EMS call volumes, and lack of access for EMS agencies to COVID-19-related funding.

The Office of EMS and the EMS community are addressing the mental health of the EMS and 911 dispatch workforce through the following activities:

- Presentations to the White House Interagency Policy Committee for Suicide Prevention
- Collaboration with the U.S. Centers for Disease Control and Prevention to conduct research on first responder suicide
- Collaboration with the Office of Suicide Prevention at the Substance Abuse and Mental Health Services Administration
- Improved mental health, stress management, and health resources on EMS.gov
- Mental health and occupational stress listening sessions

To address the needs of tribal and rural EMS agencies during the COVID-19 pandemic, representatives of the Indian Health Service and the University of New Mexico Center for Rural and Tribal EMS meet monthly to discuss technical assistance and resources (including funding opportunities) for tribal and rural EMS agencies.

FICEMS Evidence-Based Practice and Quality Committee

This committee briefs FICEMS on the status of evidence-based guideline development and implementation. Recent activities include the following:

- Systematic review of evidence on prehospital airway management

- Funding opportunity notice for an evidence-based guideline for prehospital airway management
- Ongoing development of an evidence-based guideline for the pharmacologic management of acute pain by EMS providers
- Revised field trauma triage evidence-based guideline

The committee also identifies mechanisms for disseminating evidence-based guidelines to stakeholders. The EMS for Children Innovation and Improvement Resource Center is creating Pediatric Education and Advocacy Kits to house educational resources that can optimize the application of current evidence into clinical practice by frontline health care providers, including prehospital personnel.

Other updates from the committee are as follows:

- The Strategies to Innovate EmeRgENcy Care Clinical Trials Network improves outcomes of patients with neurologic, cardiac, respiratory, and hematologic emergencies by identifying effective treatments to administer in the earliest stages of care, including in emergency departments and prehospital settings.
- The Pediatric Dose Optimization for Seizures in EMS study is measuring the impact of standardized EMS midazolam administration on seizure treatment effectiveness and safety.
- Four demonstration projects are developing rural EMS performance measures.
- The new First Aid for Severe Trauma course is for high school students.
- A fiscal year 2022 funding concept will increase accurate EMS reporting.
- A group of civilian and military leaders recently published an opinion paper on decreasing preventable prehospital deaths due to hemorrhage.
- A new guide helps rural communities develop volunteer EMS and ambulance service models.

National EMS Information System (NEMSIS)

NEMSIS collects, stores, and shares tens of millions of records from most U.S. states and territories each year. In 2020, NEMSIS had data on almost 268 million events and more than 19 million data on treated and transported 911 responses.

In 2021, more than 1,000 research publications used NEMSIS data. NEMSIS data are used for public health surveillance, EMS resource allocation, and evaluation of clinician and EMS system performance. For example, NEMSIS data have been used to track patients with influenza-like illness (ILI) as well as personal protective equipment shortages and COVID-19-related stress at EMS agencies.

On January 29, 2020, the National Highway Traffic Safety Administration (NHTSA) hosted a listening session on data collection in the prehospital environment, data exchange between the hospital and prehospital environments, and ways for hospitals to share data with prehospital systems so that these systems can monitor the effectiveness of the care they provide. The summit highlighted misunderstandings about the data that prehospital agencies and hospitals may share with one another under HIPAA (Health Insurance Portability and Accountability Act) and the need to standardize the data shared between prehospital agencies and hospitals. NHTSA will

produce standardized data definitions and data elements for prehospital agencies, data standards for obtaining these data, and ways for hospitals to supply these data.

NEMSIS plans include capturing the following data:

- Acts of violence against EMS personnel
- Injuries to and deaths of EMS personnel in the line of duty
- EMS agency and staffing characteristics
- Ambulance crashes and daily operations of ambulance services
- Mobile integrated health
- Community paramedicine
- Air medical services
- Critical care
- Medical supply use

Impact of COVID-19 on EMS

The number of EMS activations decreased dramatically in the spring of 2020, after the COVID-19 pandemic began. The number of EMS activations related to ILI symptoms also increased, which is typical during the flu season, but these rates were higher than expected. Other EMS-attended events whose rates climbed sharply in early 2020 before dropping precipitously were cardiac events, scene deaths, and injuries. Rates of opioid-related activations and those involving naloxone administration also rose during this period, but more gradually, and they also dropped more gradually. However, vehicle crash activations dropped sharply before rising gradually to typical rates. Although suicide-related and alcohol-related activations dropped early in the pandemic, they rose to typical levels by mid-2020. The trend was similar for mental and behavioral health activations. Finally, the average ILI offload time rose sharply in the spring of 2020, fell dramatically through week 23, and then gradually increased until the end of the year.

Workforce and Safety Subgroup of FICEMS

This subgroup addresses the following Goals 5 and 6 of the FICEMS strategic plan. The subgroup collaborates with other subgroups addressing these goals on next steps and "in process" activities.

Pediatric Readiness: EMS for Children

The State Partnership Program of EMS for Children is a national network of pediatric champions that are improving systems of care across the United States. The program aims to improve national performance measures.

The EMS for Children Targeted Issues Programs are expanding the pediatric emergency medicine evidence base by examining approaches to improve the delivery of optimal pediatric clinical cancer and enhance patient health outcomes related to emergency care.

The Pediatric Emergency Care Applied Research Network supports high-quality, multicenter research on the prevention and management of acute illness and injuries in children. To date, the network has supported 50 externally supported and 11 internally supported studies.

The Innovation & Improvement Center implements strategies to minimize the morbidity and mortality of acutely ill and injured children. The center is working to show how to leverage quality improvement science and the expertise of co-lead organizations, professional societies, and federal agencies to improve health care outcomes for children.

Other updates are as follows:

- The Pediatric Medical Recognition Community of Practice helps EMS for Children grantees expand the number of hospitals participating in a standardized pediatric medical recognition program.
- The Pediatric Emergency Care Coordinator Community of Practice shares best practices and tools to improve prehospital care through pediatric emergency care coordinators.
- The National Pediatric Readiness Quality Collaborative uses intervention bundles to improve pediatric patient safety and the timeliness and effectiveness of care.
- The Pediatric Readiness Community of Practice fosters collaboration to improve pediatric readiness.
- National pediatric disaster preparedness experts helped hospitals in the Pediatric Disaster Preparedness Quality Collaborative enhance their ability to receive and treat children during a disaster.
- The Telehealth Collaborative evaluates the impact of public health crises on children and youth with special health care needs or behavioral health emergencies.
- The EMS for Children Data Center helps large multicenter randomized clinical trials and EMS for Children grant programs collect and analyze data.
- The Health Resources and Services Administration has released a competitive funding opportunity to support expansion and improvement of the delivery of high-quality emergency services for children.

Appendix C: Subcommittee Meeting Summaries

Preparedness and Education Subcommittee

Lori Knight, RN, explained the subcommittee would discuss an advisory, Human Trafficking Education for EMS Professionals, that has interim status. Work on this advisory was initially led by an ad hoc NEMSAC committee, whose role was to determine whether NEMSAC should address the effects of human trafficking on EMS, not how EMS affects human trafficking. The ad hoc committee recommended that NEMSAC develop an advisory on this topic, and NEMSAC assigned it to the Preparedness and Education Subcommittee. Ms. Knight hoped that NEMSAC would vote to give this advisory final status at this meeting. Because this advisory has interim status, the subcommittee's task was not to make substantive changes but to address any typographic, grammatic, or similar errors.

The advisory explains that some EMS professionals do not follow mandatory reporting requirements when they do not report potential human trafficking situations. Education for EMS professionals at all levels is therefore needed. Among other recommendations, the advisory purposes the development of a single clearinghouse on the Department of Homeland Security (DHS) Blue Campaign website of educational materials related to human trafficking for EMS providers at all levels. Most information on the Blue Campaign website is for law enforcement personnel, so the advisory recommends that the site add information specific to EMS providers.

Human trafficking does not necessarily involve the movement of people across state or national borders. It can occur within the victim's home city. Victims are minors or adults held against their will who are trafficked for labor or sexual exploitation.

Mark Gestring, MD, noted the major human trafficking concern on the nation's southern border and wondered how to address this catastrophe in the advisory.

Kathleen Adelgais, MD, who helped develop the advisory, said that mandatory reporting required by state and federal legislation of suspected human trafficking by EMS personnel applies only to minors. EMS providers need to be aware of these requirements so that they can comply, which requires an understanding of the signs of human trafficking or even potential trafficking. This is the reason the advisory focuses on education.

Ms. Knight agreed that the advisory needs to focus its recommendations on the responsibilities of EMS providers. Victims of human trafficking have reported that calling EMS agencies several times or visiting an emergency department several times, but no one identified their situation or helped them. Education of EMS providers is therefore very important.

Cherie Bartram explained that 911 telecommunicators also need training on the signs of human trafficking during the initial 911 call. Too often, telecommunicators do not take repeat callers seriously enough because they are not familiar with the potential reasons for their frequent calls.

Eric Cheney of the Office of EMS explained that the advisory addresses some of the activities that ended when DHS replaced its Office of Health Affairs, including education for EMS

providers on human trafficking the United States, how to identify victims or potential victims, how to help victims, and how to report these cases.

Lillian Bonsignore said that the type of education recommended in the advisory can only have positive results and giving EMS providers the tools to recognize this issue or even understand that it extends beyond over-the-border issues will be helpful. The education should emphasize the importance of communicating the most critical information to dispatch centers to avoid unintentionally taking up too much of a dispatcher's time, which could lead to other problems.

Ryan Walter, MBA, EdD, asked whether NEMSAC has previously issued any recommendations on child and elder abuse. Ms. Knight said that NEMSAC has not developed advisories on these topics, but child abuse reporting is already required by all states and by federal law. Some states require notification of human trafficking of adults younger than 26 or 24, but these mandates are inconsistent. NEMSAC's charter does not permit it to provide advice on legislation.

Mr. O'Neal pointed out that because NEMSAC cannot lobby federal or state governments, the subcommittee did a wonderful job of doing what NEMSAC can do, which is to add content to the national education agenda.

Brenden Hayden asked about the role of the recommended expert panel and noted the importance of including this topic in ongoing education for EMS personnel. Ms. Knight replied that the panel is likely to recommend ongoing training, and the recommendation is for the panel to develop an outline of the human trafficking topics that should be covered. Local jurisdictions, states, or national associations might require the resulting training for recertification. Kathleen Adelgais, MD, MPH/MSPH, explained that a continued competency agenda group led by the National Registry of Emergency Medical Technicians is addressing continued education and competency assessment for EMS personnel. Inclusion of human trafficking in the national EMS education agenda would lead to work on this topic by this group. Mr. Mole said that this new agenda will probably be finalized in 2022.

Equitable Patient Care Subcommittee

Background

Mr. Washko summarized the interim advisory, Reducing Social Inequities in EMS through a National Out-of-Hospital Cardiac Arrest [OHCA] Registry. The recommended registry would help the EMS field measure equitable patient care in the United States. Dr. Adelgais explained that this advisory addresses disparities in OHCA outcomes among children and people of color by recommending use of a data registry to drive awareness. The subcommittee had originally considered recommending use of a proprietary registry, such as the Cardiac Arrest Registry to Enhance Survival (CARES).

National EMS Information System (NEMSIS) and Other Datasets

Peter Taillac, MD, viewed the original version of the advisory as a statement of support for the CARES registry (which not proprietary), which covers almost 50% of the U.S. population. The advisory now recommends that NEMSIS reproduce CARES by adding outcomes data to a NEMSIS cardiac arrest registry, which NEMSIS does not currently have. Mr. Washko said that

this was not the intent. Because NEMSIS is the standard registry for EMS data, the recommendation is to collect OHCA data into NEMSIS. Requiring EMS providers to submit OHCA data would force hospitals to submit OHCA data, which appears to be the main intent of the advisory.

Mr. Cheney explained that NEMSIS works closely with CARES and other registries to ensure that the NEMSIS data elements are consistent with those used by these other resources. The advisory recommends that NEMSIS collect OHCA data to maintain consistency with CARES. Mr. Washko added that the National EMS Quality Alliance (NEMSQA) could work with CARES to develop national measures. Mr. Cheney reported that the NEMSIS team supports NEMSQA.

Mr. Cheney said that all of the recommendations in the advisory are feasible. Even states that do not currently submit data to NEMSIS do collect data using the NEMSIS data standard and can therefore send data to CARES.

Hospital Data in NEMSIS

Mark Gestring, MD, asked about hospital outcomes data in NEMSIS. Mr. Cheney replied that NEMSIS collects hospital data from jurisdictions in which EMS agencies have agreements with hospitals to submit data on patients delivered by these agencies. NEMSIS uses the same data standard as hospitals, but it has struggled to integrate data from certain hospital electronic medical records.

Dr. Taillac pointed out that NEMSIS does not collect or report national hospital outcomes data. CARES integrates prehospital records with related outcomes data from hospitals.

Dr. Gestring asked whether any cardiac registries other than CARES collect outcomes data. Mr. Washko said that CARES is a national registry, but its data are collected locally, and EMS agencies decide whether to submit data to CARES. If they do so, they must enter the data manually. Collecting reliable data from hospital electronic medical records is challenging.

Challenges of Submitting CARES Data

Mr. Washko reported that his agency is unable to use CARES data because of funding challenges. Although the advisory does not recommend funding, making reporting mandatory typically leads to financing.

Mr. O'Neal reported that the Kentucky state government pays the CARES fees, and state coordinators recruit hospitals to submit their outcomes data. In addition, the Kentucky health information exchange collects EMS records, and hospitals can submit data to this resource. State-operated systems could develop relationships with EMS agencies and hospitals to submit data to CARES automatically. The National Highway Traffic Safety Administration (NHTSA) might be able to provide funding to state offices of highway safety for these activities. Alicia Sledge said that funding for state highway safety offices must be used only for motor vehicle crashes. If NHTSA decides to provide funding for EMS agencies to collect OHCA data, it might consider giving the funding to state EMS offices instead of highway offices.

Mr. Cheney suggested that the next NEMSAC meeting feature a presentation from the Office of the National Coordinator for Health Information Technology at the Department of Health and Human Services. This office has several related activities. He added that the main barriers to data submission are usually lack of funding and willingness to share data rather than technology challenges.

Monitoring Equity of EMS Care

Mr. Washko pointed out that the EMS Agenda 2050 calls for equitable patient care, which requires detailed data to identify inequities. Mr. Cheney said that NEMSIS collects race and ethnicity data, but these data are not widely collected. The sex and gender data are also incomplete.

Dr. Taillac said that asking a patient about their ethnicity at the scene of an emergency is difficult. Ms. Bonsignore added that patients do not want to provide this information, and they occasionally assault EMS personnel who ask these questions. In addition, making the submission of additional data mandatory adds to the time that providers spend at the scene, which affects their availability. Mr. Cheney said that his top goal for NEMSIS is reduce the time required to complete a patient care report for EMS clinicians because time-consuming reporting requirements often result in the submission of less accurate data.

Carol Jorgensen wondered how an EMS provider could collect any of this information from a patient undergoing OHCA. If no one else can answer the questions on the patient's behalf, the EMS providers will struggle to obtain answers.

Mr. Washko noted that NEMSIS does not capture religion data, but hospitals typically gather these data. He wondered whether this data element should be added to NEMSIS. Mr. Cheney said that when a patient is hurting, they do not think it appropriate for the EMS provider to ask them about their religion or other demographic information. They only want to be treated.

Jason McMullan, MD, noted that if NEMSAC encourages NEMSIS to add required data fields, hospitals will face operational challenges in collecting these data, including the need to develop technology and offer training.

Mr. Cheney offered to prepare a summary of existing demographic data. He noted that since the pandemic began, the number of deaths at home has increased and remained higher than normal.

Dr. Taillac suggested that the advisory focus on the ability to collect accurate demographic data.

Advisory Status

Mr. Washko suggested that given all of the comments during this meeting, the advisory should be returned to draft status instead of proceeding to final status.

Mr. Cheney said that this advisory is likely to need to be revised again in a year because the technology is changing so quickly, and new requirements or standards could be issued.

Dr. Adelgais noted that the deadlines in the advisory are probably no longer reasonable because the document has been in development for so long, partly as a result of the COVID-19 pandemic. Mr. O'Neal suggested that the subcommittee make a motion during the open portion of the NEMSAC meeting to return the advisory to draft status. Rejection by the subcommittee of a change in the advisory's status from interim to final might send the wrong message. Mr. Cheney added that the rationale for this motion would be reflected in the meeting's official summary.

Other Sources of Demographic Data

Dr. Adelgais said that although demographic data are useful for identifying disparities in the treatment of individual patients, other data sources, such as the U.S. Census, can be used to examine disparities in a population. In addition, linkages between EMS and hospital records could help address this need. NEMSIS data on barriers to care, such as not speaking English, that might be easier for EMS providers to document could be useful for understanding inequities in care.

Mr. Hayden said that when EMS providers ask about demographic information, their questions can erode patient confidence in the care they are receiving. He wondered whether EMS agencies could collect this information from hospital records. Ms. Bonsignore suggested that once the patient's condition has been stabilized, they could provide the information at the hospital.

Dr. Adelgais suggested that the subcommittee look into hospital data exchange and other existing sources of OHCA outcomes data. She noted, however, that many patients with OHCA do not make it to the hospital, so some data could only be collected in the prehospital environment.

Mr. O'Neal wondered whether state driver's licenses have demographic information. Other subcommittee members indicated that licenses do not include racial and ethnic information. Dr. Gestring suggested linking the patient's driver's license to another record that does have racial and ethnic information. Mr. Washko said that this solution is probably not feasible because patients do not have a master identification number for all of their health care. He agreed that using other sources to collect the needed information is a possible solution.

Mr. Washko said that when EMS personnel respond to the scene of a death, the death certificate might provide racial and ethnic information.

Appendix D: NEMSAC Subcommittee Appointments

Committee Name	Chair	Vice Chair	Members	Ex Officio Members
Professional Safety	Matthew Powers	Ayobami Ogunsola	W. Mike McMichael Lillian Bonsignore	Chuck O'Neal
Integration and Technology	Cheri Bartram	Mary Ahlers	Ryan Walter Tom Arkins	Jonathan Washko Ayobami Ogunsola Chuck O'Neal
Preparedness and Education	Kathleen Adelgais	Peter Taillac	Alicia Sledge Lisa Basgall	David Fifer David Mendonsa Cheri Bartram Ayobami Ogunsola Richard Bradley Chuck O'Neal Mary Ahlers
Equitable Patient Care	Richard Bradley	Suzanne Prentiss	Jason McMullan Danita Koehler	Jonathan Washko Kathleen Adelgais Ayobami Ogunsola Chuck O'Neal
Sustainability and Efficiency	Jonathan Washko	Brenden Hayden	Paul Brennan David Mendonsa	Ryan Walter Danita Koehler Ayobami Ogunsola Chuck O'Neal
Adaptability and Innovation	Lori Knight	David Fifer	Carol Jorgensen Mark Gestring	Ryan Walter Jonathan Washko Cheri Bartram Tom Arkins Ayobami Ogunsola Chuck O'Neal
Ad Hoc Motor Vehicle Crash	Alicia Sledge	Mark Gestring	Jonathan Washko Ayobami Ogunsola	Chuck O'Neal